



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,684	09/20/2004	Muncharu Ito	040476	5726
23850	7590	05/26/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP			CHEN, SOPHIA S	
1725 K STREET, NW			ART UNIT	
SUITE 1000			PAPER NUMBER	
WASHINGTON, DC 20006			2852	

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/506,684

Applicant(s)

ITO, MUNEHARU

Examiner

Sophia S. Chen

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/20/04 &amp; 11/16/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Ex parte Quayle***

1. This application is in condition for allowance except for the following formal matters:

#### ***Specification***

2. The abstract of the disclosure is objected to because of the inclusion of legal phraseology, such as "comprises" (page 49, line 3). Correction is required. See MPEP § 608.01(b).
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Objections***

4. Claims 1-7, 9, 10, and 16-19 contain the following informalities:
  - a. Claim 1, line 3, "a fine particles is" is grammatically incorrect.
  - b. Claim 2, line 2, "particles has" is grammatically incorrect.
  - c. Claim 3, line 2, "particles is" is grammatically incorrect.
  - d. Claim 4, line 2, "particles has" is grammatically incorrect.
  - e. Claim 5, line 2, "particles is" is grammatically incorrect.
  - f. Claim 6, line 2, "particles comprises" is grammatically incorrect.
  - g. Claim 7, line 2, "particles is" is grammatically incorrect.

- h. Claim 9, line 2, "particles is" is grammatically incorrect.
- i. Claim 10, line 2, "particles is" is grammatically incorrect.
- j. Claim 16, line 6, "a fine particles" is grammatically incorrect.
- k. Claim 17, line 5, "particles is" is grammatically incorrect.
- l. Claim 18, line 4, "a fine particles" is grammatically incorrect.
- m. Claim 19, line 5, "a fine particles" is grammatically incorrect.

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

- 5. Claims 1-20 are allowable over the prior art of record.
- 6. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach or suggest fine particles are attached to a surface of at least a portion of the cleaning blade to come into contact with the image bearing member in an amount of **1 to 10 mg/cm<sup>2</sup>** (emphasis added).

***Citation of Pertinent Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lindblad et al. (US Pat. No. 5,138,395) discloses a cleaning blade being made from a thermoplastic material having a compounded additive for lubrication.

Yanai et al. (US Pat. No. 5,145,724) discloses a cleaning blade being coated with graphite fluoride.

Kuribayashi et al. (US Pat. No. 5,363,182) discloses a coating layer of a cleaning blade being formed by dispersing lubricant particles in a nylon resin solution and applying to the surface of the blade followed by drying.

Kuribayashi et al. (US Pat. No. 5,438,400) discloses a cleaning blade comprising a surface coating layer having a coating material bead at a position out of a tip end of the cleaning blade.

Yanai et al. (US Pat. No. 5,450,184) discloses a cleaning blade for electrophotography has a blade body having a rubbery elasticity and a coating layer covering the surface of the blade body.

Suwa et al. (US Pat. No. 5,646,718) discloses a cleaning blade having indefinite-foam lubricant particles.

Okado et al. (US Pat. No. 5,733,702) discloses a cleaning blade comprising a polyamide resin coat layer having fine particles.

Sato (US Pat. Pub. No. US 2002/0031384 A1) discloses a cleaning blade having lubricating fine particles.

Yamada et al. (US Pat. No. 6,453,146 B1) discloses a cleaning blade having additive.


Lindblad et al. (JP 04-294380 A) discloses a cleaning blade being made from a thermoplastic material having a compounded additive for lubrication.

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (571) 272-2133. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sophia S. Chen  
Primary Examiner  
Art Unit 2852